Flight-Testing Newton's Laws			
2004 Science			
Grade Level Articulations			
Arizona Science			
Grades 9-12			
Activity/Lesson	**State**	**Standards**	
Session-10 (1-5)	AZ	SCI.9-12.5.2.PO 3	Explain how Newton’s 1st Law applies to objects at rest or moving at constant velocity.
Session-10 (1-5)	AZ	SCI.9-12.5.2.PO 4.a	Using Newton’s 2nd Law of Motion, analyze the relationships among the net force acting on a body, the mass of the body, and the resulting acceleration (graphically)
Session-10 (1-5)	AZ	SCI.9-12.5.2.PO 4.b	Using Newton’s 2nd Law of Motion, analyze the relationships among the net force acting on a body, the mass of the body, and the resulting acceleration (mathematically)
Session-10 (1-5)	AZ	SCI.9-12.5.2.PO 5	Use Newton’s 3rd Law to explain forces as interactions between bodies (e.g., a table pushing up on a vase that is pushing down on it; an athlete pushing on a basketball as the ball pushes back on her).
Session-10 (1-5)	AZ	SCI.9-12.5.2.PO 8	Analyze the general relationships among force, acceleration, and motion for an object undergoing uniform circular motion.
Session-10 (1-5)	AZ	SCI.9-12.5.2.PO 9	Represent the force conditions required to maintain static equilibrium.
Session-10 (1-5)	AZ	SCI.9-12.5.2.PO 10	Describe the nature and magnitude of frictional forces.